

DO NOT OPEN THIS TEST BOOKLET TILL YOU ARE ASKED TO DO SO.

TR/DLPI/CST/II/B/14

Test Booklet Series

**TEST BOOKLET
GENERAL ABILITY TEST
PART-II**

B

(Signature of the Candidate)

(Invigilator's Signature)

Time allowed : 1 hour 30 mins (One hour & thirty mins)

Maximum Marks – 60

INSTRUCTIONS

1. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS TEST BOOKLET DOES NOT HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR ITEMS ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET.
2. ENCODE CLEARLY THE TEST BOOKLET SERIES IN THE APPROPRIATE PLACE IN THE ANSWER SHEET BY BLACK BALL POINT PEN ONLY.
3. This Test Booklet contains 60 items (questions). Each question, carrying 1 (one) mark only, has four responses (answers). You will select the response which you want to mark on the Answer Sheet. In case you feel that there is more than one correct response, mark the response which you consider the most appropriate. In any case, choose **ONLY ONE** response for each item.
4. You have to mark all your responses by **Black Ball Point Pen only** on the separate Answer Sheet provided. See directions in the Answer Sheet.
5. All items carry equal marks.
6. Before you proceed to mark in the Answer Sheet, the responses to various items in the Test Booklet, you have to fill in some particulars in the Answer Sheet as per instruction sent to you with your Admission Certificate.
7. After you have completed filling in responses on the Answer Sheet and the examination is completed, you should hand over the Answer Sheet to the Invigilator only. You are permitted to take the Test Booklet with you.
8. Sheets for rough work are appended on the Test Booklet at the end.
9. **Penalty for wrong answers :**
 - (i) For each question for which a wrong answer / multiple answer has been given by the candidate, $\frac{1}{2}$ (half) mark will be deducted as penalty.
 - (ii) If a question is left blank, i.e. no answer is given by the candidate ; there will be **no penalty** for that question.

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COMPUTER SCIENCE TECHNOLOGY

Total Marks - 60

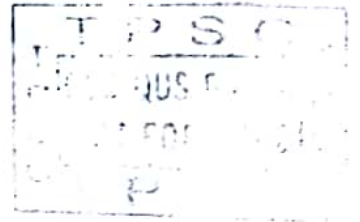
Four options are given against each of the following questions. Select the best / correct option from among the four options and encode in the Answer Sheet by using **Black Ball Point Pen** only as per example given below.

Example : 8 bits form

- | | |
|-----------------|----------------|
| (a) One byte | (b) Two bytes |
| (c) Three bytes | (d) Four bytes |

Answer : ☒ (a) (b) (c) (d)

- | | |
|--|---|
| <p>1. Full form of CPU is</p> <p>(a) Central Processing Unit</p> <p>(b) Common Processing Unit</p> <p>(c) Critical Processing Unit</p> <p>(d) Common Presentation Unit</p> | <p>4. Decimal equivalent of hexadecimal number $(A)_{16}$ is</p> <p>(a) 10</p> <p>(b) 11</p> <p>(c) 12</p> <p>(d) 13</p> |
| <p>2. One nibble means</p> <p>(a) One bit</p> <p>(b) Two bits</p> <p>(c) Three bits</p> <p>(d) Four bits</p> | <p>5. Spooling is performed during</p> <p>(a) Input output operation of slow devices</p> <p>(b) Network operation</p> <p>(c) Arithmetic operation</p> <p>(d) Logic operation</p> |
| <p>3. The base of a binary system is</p> <p>(a) One</p> <p>(b) Two</p> <p>(c) Three</p> <p>(d) Four</p> | <p>6. 16 bit program counter can directly address</p> <p>(a) 2^4 byte memory</p> <p>(b) 2^{16} byte memory</p> <p>(c) 16 byte memory</p> <p>(d) 16^2 byte memory</p> |



7. Which of the following command uses stack ?
 - (a) Move
 - (b) Add
 - (c) Load
 - (d) Push
8. Full form of CD is
 - (a) Compact disk
 - (b) Control device
 - (c) Control disk
 - (d) Control drive
9. A group of related data that share a common name is
 - (a) Pointer
 - (b) Array
 - (c) Function
 - (d) Stack
10. In C++, a function contained within a class is called
 - (a) a member function
 - (b) an operator
 - (c) a class function
 - (d) a procedure
11. A normal C++ operator that acts in a special way on newly defined data types is said to be
 - (a) Inherited
 - (b) Encapsulated
 - (c) Classified
 - (d) Overload
12. A enumerated data type brings together a group of
 - (a) items of different data types
 - (b) related data variables
 - (c) integers with user-defined names
 - (d) constant values
13. Class members are by default
 - (a) private
 - (b) protected
 - (c) public
 - (d) None of the above
14. By inline functions call overload is
 - (a) increased
 - (b) reduced
 - (c) constant
 - (d) None of the above

15. In a class, only the member function can access data which is not accessible outside. The feature is called

- (a) Data hiding
- (b) Data manipulation
- (c) Data processing
- (d) Data overloading

16. `Ptr = A` means

- (a) Standard stream output
- (b) `Ptr` contains address of first element of array `A`
- (c) `Ptr` is a constant to a character
- (d) Output buffer stream

17. `New` is used

- (a) to allocate memory in static manner
- (b) to allocate memory dynamically
- (c) to reduce memory
- (d) to increase buffered memory

18. Polymorphism means

- (a) many form
- (b) multiple operators
- (c) specified operators
- (d) default operators

19. A class that contains at least one pure virtual function is called as

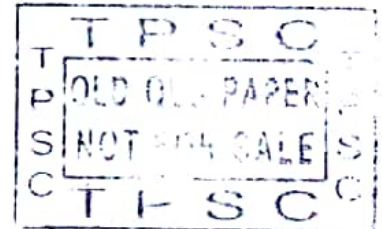
- (a) pure class
- (b) abstract class
- (c) base class
- (d) derived class

20. Register is used to

- (a) define a buffer
- (b) define CPU speed
- (c) reduce the size of program and improve the performance
- (d) define constant

21. A function which has to have same name as the class

- (a) constructor ()
- (b) friend ()
- (c) copy ()
- (d) extern ()



22. The availability of source code at compile time is called

- (a) static binding
- (b) dynamic binding
- (c) late binding
- (d) compiled binding

23. The level of data abstraction which describes how the data is actually stored is
- (a) physical level
 - (b) conceptual level
 - (c) storage level
 - (d) file level
24. The level of abstraction describes only part of the entire database is called
- (a) conceptual level
 - (b) view level
 - (c) procedural level
 - (d) functional level
25. Data about data is normally termed as
- (a) Meta data
 - (b) Data dictionary
 - (c) Database
 - (d) Object data
26. Which one of these is an aggregate function in SQL ?
- (a) avg
 - (b) select
 - (c) ordered by
 - (d) select by
27. Every BCNF decomposition is
- (a) Dependency preserving
 - (b) Not dependency preserving
 - (c) Need be dependency preserving
 - (d) None of these
28. Which normal form is most desirable ?
- (a) DKNF
 - (b) 1 NF
 - (c) 2 NF
 - (d) 4 NF
29. The translation of a query into its internal form is usually done using
- (a) Query processing
 - (b) Relational algebra
 - (c) Database schema
 - (d) The structure of database
30. The syntax of the users query is verified by the
- (a) Parser
 - (b) The database manager
 - (c) Query optimizer
 - (d) DBA

31. In a relational database a referential integrity constraint is specified with the help of

- (a) Primary key
- (b) Foreign key
- (c) Secondary key
- (d) Consistency checking

32. The principle means of identifying entities within an entity set is

- (a) Tuple
- (b) Primary key
- (c) Pointer
- (d) Record

33. Indexed sequential file is created using following storage device

- (a) Direct access
- (b) Random access
- (c) Sequential access
- (d) Primary access

34. DTE is popularly known as

- (a) Data Terminal Equipment
- (b) Digital Terminal Equipment
- (c) Discrete Time Equipment
- (d) Data Terminal End

35. Half duplex communication uses

- (a) Half channel
- (b) One channel
- (c) Two channels
- (d) Three channels

36. Telephone network usually uses

- (a) Half duplex communication
- (b) Full duplex communication
- (c) Simplex communication
- (d) Complex communication

37. Radio broadcasting is an example of

- (a) FDM
- (b) TDM
- (c) PQM
- (d) XQM

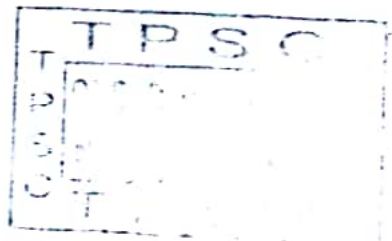


38. Packet generation in ALOHA network follows

- (a) Poisson distribution
- (b) Gaussian distribution
- (c) Normal distribution
- (d) Pascal distribution

39. Optical fiber has
- (a) Low interference
 - (b) Low bandwidth
 - (c) High interference
 - (d) Low gain
40. IP addresses of source and destinations are added in
- (a) Application layer
 - (b) Transport layer
 - (c) Network layer
 - (d) Datalink layer
41. ARP is used to get
- (a) routing table
 - (b) packet size
 - (c) physical address
 - (d) Window size
42. Packet fragmentation is done in
- (a) Application layer
 - (b) Datalink layer
 - (c) Session layer
 - (d) Transport layer
43. Window size is transmitted through
- (a) TCP header
 - (b) IP header
 - (c) Frame header
 - (d) DNS header
44. Satellite communication uses principle of
- (a) Ionospheric reflection
 - (b) Ionospheric refraction
 - (c) Ionospheric diffraction
 - (d) Tropospheric reflection
45. 150.50.50.50 is an example of IP address of type
- (a) Class A
 - (b) Class B
 - (c) Class C
 - (d) Class D
46. To get the network address from IP address which of the following information is essential ?
- (a) Bit size
 - (b) Window size
 - (c) Subnet mask
 - (d) Frame size



47. Access permission of a file or directory can be changed by using the UNIX commands
- (a) chmod
 - (b) chngmod
 - (c) chown
 - (d) cd
48. Available disk space can be determined under UNIX using the command
- (a) dir
 - (b) df
 - (c) du
 - (d) dspace
49. On changing the permissions of a UNIX file, which of the following field is modified ?
- (a) File modify time
 - (b) Inode modify time
 - (c) File access time
 - (d) File protection time
50. Information about a UNIX file is stored in
- (a) a system-wide file table
 - (b) the inode associated with the file
 - (c) a file allocation table within the kernel
 - (d) a file matrix
51. In UNIX to give message to all logged in users simultaneously we use
- (a) msg
 - (b) wall
 - (c) msg all
 - (d) echo all
52. In UNIX the file which runs automatically for all users before login is
- (a) / etc / profile
 - (b) / dev / profile
 - (c) / home / user
 - (d) / bin / rlogin
53. In 8085, address of next instruction to be executed is stored in
- (a) MAR
 - (b) PC
 - (c) MDR
 - (d) MBR
- 
54. In 8085 one of the operands is stored in
- (a) MAR
 - (b) MDR
 - (c) Accumulator
 - (d) HL Register

